

### MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/pera/

# DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA) BOARD AND CODE ADMINISTRATION DIVISION

#### **NOTICE OF ACCEPTANCE (NOA)**

Oldcastle BuildingEnvelope™ 803 Airport Road Terrell, TX 75160

#### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION:** Series "RW-5100 Ribbon" Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. RW-5100LM, titled "Product Approval Drawings - RW-5100 Ribbon Window System – Large Missile Impact", sheets 1 through 7 of 7, dated 08/27/10 with revision #1 dated 01/09/12, prepared by manufacturer, signed and sealed by William D. Cook, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: Large Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 10-1102.06 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.

MIAMI-DADE COUNTY
APPROVED

M 5/7/12

NOA No. 12-0120.11 Expiration Date: October 30, 2013 Approval Date: March 22, 2012 Page 1

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No RW-5100LM, Sheets 1 through 7 of 7, titled "Product Approval Drawings RW-5100 Ribbon Window System Large Missile Impact", dated 08/27/10 with revision #1 dated 01/09/12, prepared by manufacturer, signed and sealed by William D. Cook, P.E.

#### B. TESTS

- 1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Small Missile Impact Test per FBC, TAS 201-94
  - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of an aluminum ribbon window system, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL 0105-0210-04, Specimen #2, dated 2/09/04, signed and sealed by Vinu J. Abraham, P.E.

#### (Submitted under previous NOA #08-1015.13)

2. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum ribbon window, prepared by Hurricane Test Laboratory, LLC, Test Report No.
HTL 0105-0815-02, Specimen #2, dated 8/20/02, signed and sealed by Vinu J. Abraham, P.E.

#### (Submitted under previous NOA #04-0504.07)

Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of an aluminum ribbon window, prepared by Hurricane Test Laboratory, LLC, Test Report No.
HTL 0105-0815-02, Specimen #3, dated 8/20/02, signed and sealed by Vinu J. Abraham, P.E.

#### (Submitted under previous NOA #04-0504.07)

- 4. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Small Missile Impact Test per FBC, TAS 201-94
  - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of an aluminum ribbon window, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL 0105-0815-02, Specimen #4, dated 8/21/02, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA #04-0504.07)

Manuel Perez, P.E. Product Control Examiner NOA No. 12-0120.11

Expiration Date: October 30, 2013 Approval Date: March 22, 2012

#### **NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

#### B. TESTS (CONTINUED)

- 5. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of an aluminum ribbon window, prepared by Hurricane Test Laboratory, LLC, Test Report No.

HTL 0105-0619-02, dated 6/24/02, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA #04-0504.07)

#### C. CALCULATIONS:

- 1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated 10/01/08, 01/20/09, 01/18/11, and updated on 01/09/12, prepared, signed and sealed by William D. Cook, P.E.
- 2. Glazing complies with ASTM E1300-04.

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 08–1224.04 issued to Solutia, Inc. for their "Saflex Composites Glass Interlayer with PET Core" dated 02/25/09, expiring on 12/11/13.
- 2. Notice of Acceptance No. 07-1116.11 issued to Saf-Glas, LLC for their "SAF-GLAS Polycarbonate Laminate", dated 12/27/07, expiring on 12/16/12.

#### F. STATEMENTS

- 1. Statement letter of conformance complying with FBC-2010, dated January 09, 2012, signed and sealed by William D. Cook, P.E.
- 2. Statement letter of no financial interest, dated January 09, 2012, signed and sealed by William D. Cook, P.E.
- 3. Laboratory compliance letter for Test Reports No. HTL-0105-0619-02 and HTL-0105-0815-02, issued by Hurricane Test Laboratory, Inc., dated March 21, 2003, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA #04-0504.07)

#### G. OTHER

1. Notice of Acceptance No. 10-1102.06, issued to Oldcastle BuildingEnvelope™ for their Series "RW-5100 Ribbon" Aluminum Fixed Window – L.M.I., approved on 03/10/11 and expiring on 10/30/13.

Manuel Perez, P.E. Product Control Examiner NOA No. 12-0120,11

Expiration Date: October 30, 2013

Approval Date: March 22, 2012

# RW-5100 RIBBON WINDOW SYSTEM LARGE MISSILE IMPACT RESISTANT

#### **INDEX TO DRAWINGS**

SHEET 1: INDEX TO DRAWINGS AND NOTES

SHEET 2: TYPICAL ELEVATION

SHEET 3: BILL OF MATERIALS

SHEET 4: TYPICAL HORIZONTAL GLAZING DETAILS

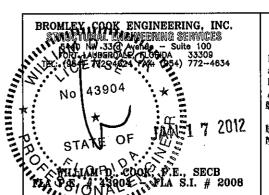
SHEET 5: TYPICAL VERTICALGLAZING DETAILS

SHEET 6: MULL CAP INSTALLATION DETAILS

SHEET 7: EXTRUSION PROFILES

#### GENERAL NOTES

- 1) THIS WINDOW SYSTEM HAS BEEN TESTED, ENGINEERED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN LOAD CHARTS. SYSTEM CONFORMS TO THE 2010 FBC, HVHZ REGION.
- 2) ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- 3) BUCK, OPENINGS & BUCK FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS FOR EACH APPLICATION. BUCKS SHALL BE DESIGNED BY SPECIALTY ENGINEER OR ENGINEER OF RECORD.
- 4) BUCK FASTENERS MAY NOT EXCEED 16" O.C. SPACING AROUND OPENINGS.
- 5) THE SYSTEM SHOWN HEREIN WAS TESTED IN CONFORMANCE WITH DADE COUNTY PROTOCOLS TAS-201, 202, 203.
- 6) A 33% INCREASE IN ALLOWABLE STRESS NOT USED IN ANALYSIS.
- 7) ALL STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR PLATED PER FBC 2003.2.4
- 8) NO IMPACT RESISTANT SHUTTERS ARE REQUIRED WITH THIS SYSTEM.
- 9) DESIGN PRESSURE RATING SEE TABLE 1, SHEET 2



FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 12-0120.11
Expiration Date 05:30,2013

By Manual Product Control

1 BM 1—9—12 CODE UPGRADE
REV BY DATE DESCRIPTION

BuildingEnvelope\*
RPORT RD. TERRELL TX 75160
(972) 551-6100

PRODUCT APPROVAL DRAWINGS RW-5100 RIBBON WINDOW SYSTEM LARGE MISSILE IMPACT

PROJECT NO.

SCALE

DRAWN DATE GRG 8/27/10

NOTED

DRAWING NO.
RW-5100LM

OF 7

### OLDCASTLE BUILDING ENVELOPE SERIES RW-5100 RIBBON WINDOW SYSTEM

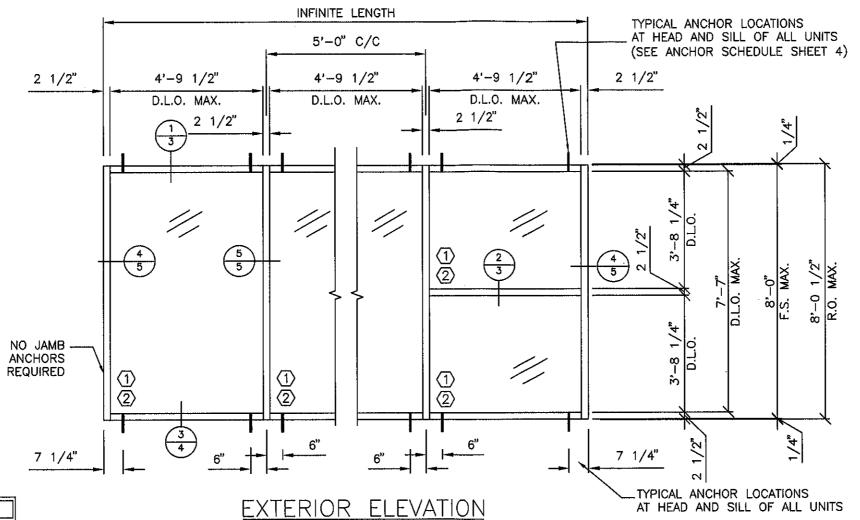
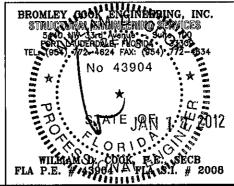


TABLE 1.		
DESIGN PRESSURE		
+70 psf (15psf WATER)	POSITIVE	
-80 psf	NEGATIVE	

	GLASS SCHEDULE (LARGE MISSILE IMPACT)			
Ĺ	MANUFACTURER		DESCRIPTION	GASKETS
	1	SECURITY IMPACT GLASS	INSULATED - LAMINATED GLASS: 1/4" H.S., 1/2" AIRSPACE, 1/4" H.S. GLASS AT INNER AND OUTER FACES .070" POLYCARBONATE015" POLYURETHANE LAMINATE	FG-5126 INT FG-5158 EXT
	2	OLDCASTLE STORMGLASS	INSULATED LAMINATED GLASS: 1/4" H.S., 1/2" AIRSPACE, 1/4" H.S. GLASS AT INNER AND OUTER FACES, .075" VANCEVA INTERLAYER	FG-5126 INT FG-5158 EXT

NOTE: REFER TO SHEET 4 FOR GLAZING DETAILS



FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12.0(20.1)
Expiration Date 27.30, 2013
By Manufold Product Control

8 MANUAL COMP

803 AIRPORT RD. TERRELL TX 75160 (972) 551-6100 **Oldcastle** BuildingEnvelope

PRODUCT APPROVAL DRAWINGS RW-5100 RIBBON WINDOW SYSTEM LARGE MISSILE IMPACT

DRAWN DATE GRG 8/27/10 SCALE NOTED

DRAWING NO.
RW-5100EM OF 7

# RW-5100 RIBBON WINDOW SYSTEM BILL OF MATERIALS

COMPONENT	SCHEDULE		
PART NO	DESCRIPTION	MANUFACTURER	ALUMINUM ALLOY & TEMPER
RW-5134	GLAZING BEAD	OBE	6063-T6
RW-5135	HEAD/HORIZ TRIM	OBE	6063-T6
RW-5140	SILL TRIM	OBE	6063-T5
RW5141	MULL CAP	OBF	6063-T6
RW-5142	JAMB CAP	OBE	6063-T6
RW-5146	JAMB MULL	OBE	6063-T6
RW-5147	MULLION	OBE	6063-T6
RW5148	MULLION	OBE	6063-T6
RW-5149	HEAD	OBE	6063-T6
RW-5150	HORIZONTAL	OBE	6063-T6
RW-5151	SILL	OBE	6063-T6
RW-5153	SILL FACE CAP	OBF.	6063-T5
RW-5161	END DAM	OBE	6063-T5
RW-5162	MULL CLIP	OBE	6063-T5
ICW-2	TYPICAL FACE CAP	OBE	6063-T5
			İ

GASKETS AND HARDWARE			
PART NO	DESCRIPTION	MANUFACTURER	LOCATION
CW-998	BULB GASKET	OBE	MULLIONS
ICW-12	ISOLATOR	OBE	ALL FACES @ 12" O.C.
FG-5157	EPDM GASKET	OBE	DLUBAK HRG2 EXTERIOR
FG-5158	EPDM GASKET	OBE	TYPICAL EXTERIOR
FG-5126	VINYL SPACER	OBE	TYPICAL INTERIOR
FG-5159	EPDM SETTING BLOCK	OBE	SILL & HORIZONTAL
RW5000-FP-5	VINYL WATER DIVERTER	OBE	HORIZONTALS
FG-5152	ALUM. SETTING CHAIR	OBE	SILL
FG-5160	VINYL BAFFLE RETAINER	OBE	SILL
RW5000-FP-6	MULL CAP (MADE FROM RW-5141)	OBE	HEAD & SILL MULLIONS
RW5000-FP-7	JAMB CAP (MADE FROM RW-5142)	OBE	HEAD & SILL JAMBS
RW5000-FP-9	END DAM (MADE FROM RW-5161)	OBE	HEAD & SILL MULLIONS
RW5000-PP-10	BAFFLE	OBE	SILL
RW5000-FP-11	MULLION CLIP(MADE FROM RW-5162)	OBE	MULLIONS
DOW 995	STRUCTURAL SILICONE	DOW-CORNING	INTERIOR GLASS
SPECTREM 2	SILICONE SEALANT	TREMCO	INTERIOR GLASS
SM-5601	SEALANT TAPE	SCHNEE-MOREHEAD	FRAME JOINTS
931	SEALANT	TREMCO VULKEM	PERIMETER SEAL, FRAME JOINTS

FASTENE	R SCHEDULE	· · · · · · · · · · · · · · · · · · ·
PART NO.	DESCRIPTION	APPLICATION
FS-327	#12 X 7/8" HWHTCS	GLAZING BEADS
FS-202	#8 X 1/2" PPH	JAMB CAP
FS-45	#8 X 1/2" PFH	MULL CAP/END DAM
FS-44	5/16" X 1" HHSTS	FRAME CONNECTIONS

NOTE: STRUCTURAL ALUMINUM TO BE 6063-T6, TRIM TO BE 6063-T5



FOR MIAMI-DADE CO. B.C.C.O.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0120.11
Expiration Date 0.7.30,2013
By Mount Solve
Miam Dade Product Contract

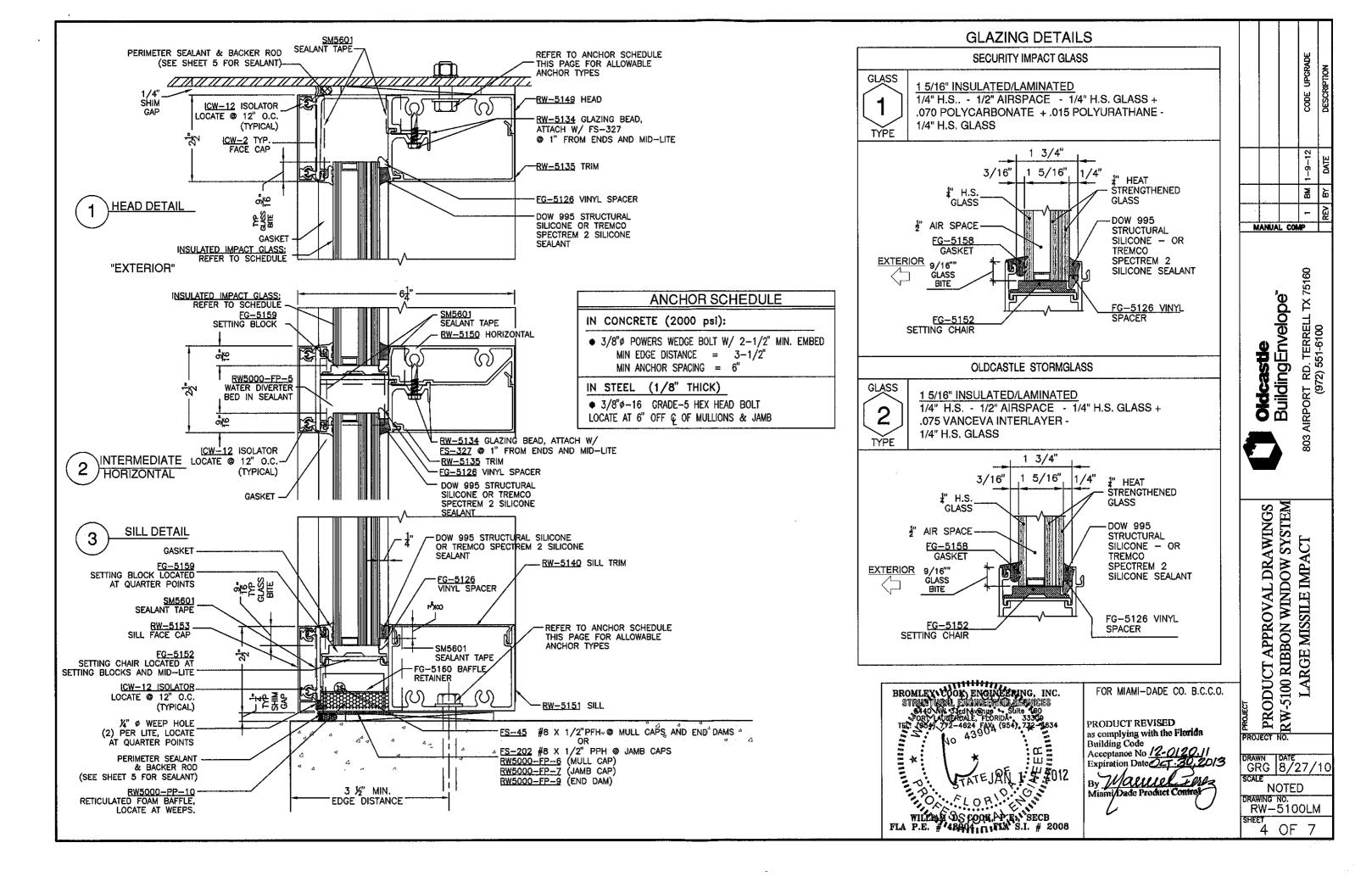
1 BM 1-9-12 CODE UPGRADE REV BY DATE DESCRIPTION

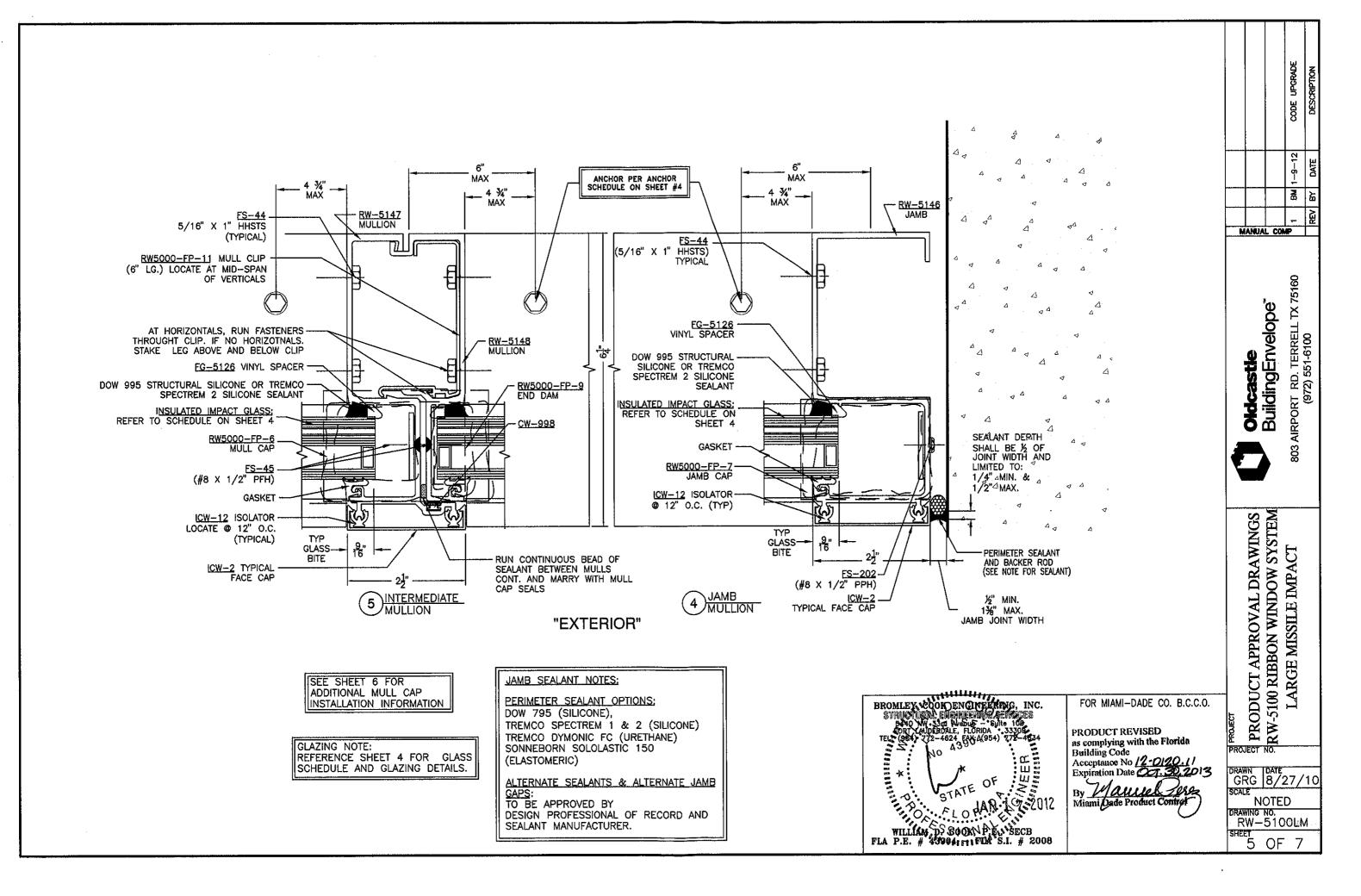
Oldcastle
BuildingEnvelope\*

PRODUCT APPROVAL DRAWINGS
RW-5100 RIBBON WINDOW SYSTEM
LARGE MISSILE IMPACT

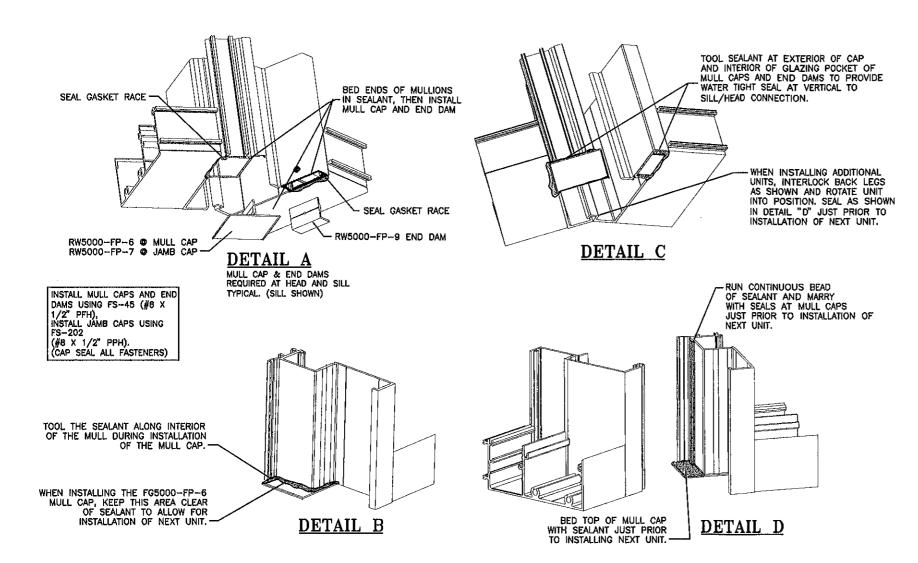
DRAWN DATE GRG 8/27/10 SCALE NOTED DRAWING NO. RW-5100LM

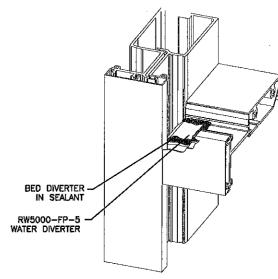
OF 7





## RW-5100 MULL CAP SEALANT DETAILS AND INSTALLATION INSTRUCTIONS





WATER DIVERTER SEALANT DETAIL LOCATE AT EACH END OF INTERMEDIATE HORIZONTALS

1) ASSEMBLE UNITS AS SHOWN ON DETAIL SHEETS 3 THRU 5. INSTALL SEALANT TAPE BETWEEN VERTICALS AND HORIZONTALS AS SHOWN.

- 2) INSTALL AND SEAL MULL CAPS AS SHOWN IN DETAILS A, B & C ABOVE.
- 3) MULL CAPS SHOULD FORM A WATER TIGHT SEAL, A TEST MAY BE CONDUCTED TO CONFIRM THIS SEAL BY BLOCKING WEEP HOLES AND FILLING SILL CAVITY WITH WATER. AFTER TEST REMOVE PLUGS FROM WEEP HOLES, DRAIN WATER, INSTALL BAFFLES AND BAFFLE RETAINERS.
- 4) INSTALL FIRST UNIT INTO OPENING (UNITS WILL INSTALL FROM LEFT TO RIGHT AS VIEWED FROM EXTERIOR OF BUILDING), LEVEL, PLUMB AND ANCHOR FIRST UNIT, WHEN SHIMMING UNITS, SHIM AT ANCHOR POINTS UNDER SILL. DO NOT PLACE SHIMS BENEATH MULL OR MULL CAP.
- 5) RUN BEAD OF SEALANT CONTINUOUS FOR FULL HEIGHT OF MULLION AND BED MULL CAP WITH SEALANT AT HEAD AND SILL AS SHOWN IN DETAIL D.
- 6) INSTALL SECOND UNIT BY BRINGING INTO POSITION FROM INSIDE OF BUILDING, TILT HEAD OF UNIT BENEATH MULL CAP, ROTATE SILL OF UNIT OVER LOWER MULL CAP, THEN INTERLOCK BACK LEGS OF MULLION (SEE DETAIL C), PLACE APPROPRIATE SHIMS BENEATH SILL MEMBER TO ALLOW FOR BETTER ALIGNMENT, AND ROTATE UNIT INTO PLACE. PLUMB AND ANCHOR.
- 7) REPEAT STEP 6 FOR ALL ADDITIONAL UNITS. MINIMUM I/4" CAULK JOINT AT JAMB IS REQUIRED FOR INSTALLATION OF FINAL UNIT.

8) SYSTEM MAY BE INSTALLED EITHER IN UN-GLAZED OR PREGLAZED FRAMES. WHEN INSTALLING UNITS AS UN-GLAZED FRAMES FOLLOW INSTRUCTIONS 4 THRU 8 AND THEN INSTALL GLASS. NEXT PLACE AN 1/8" SHIM AT MID-HEIGHT OF MULL AND CLAMP BACK OF MULL AT THE SHIM BEFORE RUNNING WEDGE TO HELP INSURE PROPER ALIGNMENT OF MULLS AT FACE OF SYSTEM. WHEN PREGLAZING FRAMES, MAKE SURE THAT UNITS ARE SQUARE AND THAT DAY LIGHT OPENINGS ARE HELD TO PROPER DIMENSIONS

BEFORE RUNNING STRUCTURAL SILICONE. (REFERENCE SILICONE MANUFACTURER FOR PROPER CLEANING AND USE OF SILICONE.)



FOR MIAMI-DADE CO. B.C.C.O.

DUCT REVISED complying with the Florida alding Code eceptance No/2-0/20 expiration Date Oct. 30, 2013 By Maurel Person

MANUAL COMP

75160 **BuildingEnvelope** RD. TERRELL TX '2) 551-6100 AIRPORT RD (972) (

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PRODUCT APPROVAL DRAWINGS RW-5100 RIBBON WINDOW SYSTEM LARGE MISSILE IMPACT PROJECT NO.

GRG 8/27/10 SCALE NOTED DRAWING NO.

RW-5100LM OF 6

